Request for Proposals
Utah State Energy Program
Utah Public Building Energy Efficiency Pilot Program
October 2007

The State of Utah, through the Utah State Energy Program, is making available as much as $75,000 in grant funds for projects involving energy efficiency upgrades to existing public buildings. Eligible upgrades must be identified as a result of an energy audit. Grants of as much as $15,000 are available to local governments. Recipients must match grant funds by paying at least 25% of the overall cost of each project.

Background

The State Energy Program (SEP) operates as a unit of the Utah Geological Survey and receives annual funds from the U.S. Department of Energy to promote energy efficiency and renewable energy within Utah. Since 2006, SEP has budgeted funds for projects in support of local governments wishing to improve their energy efficiency. The Governor's Energy Adviser is a partner in contributing funds for the program.

Energy costs are consuming a higher percentage of taxpayer-funded budgets for local entities that are already facing constrained financial situations. In past years, the SEP funded energy audits of many local government facilities. However, many governments were unable to act upon the results of such audits as a result of budgetary constraints. The purpose of this program is to provide grants that can be used to implement energy efficiency measures recommended in an independent energy audit.

Eligible Applicants

To be eligible to receive grant funds, an applicant must be located within Utah and must be a county, city, or town government.

Eligible Projects, Building Types

Eligible buildings include community centers, sports facilities, libraries, administrative buildings, courthouses, firehouses, police stations, public hospitals, maintenance facilities, water and sewage treatment plants, and other buildings owned and operated by a local government. Leased buildings and facilities are not eligible.

Eligible Projects, Upgrades

Projects must involve the upgrading of an existing building to improve the energy efficiency of the facility. Energy efficiency is taken to mean a reduction in the consumption of energy while maintaining pre-existing operations or hours of service. Projects aimed primarily at "peak shaving" or "load shifting" are not eligible. Projects must show an overall reduction in annual Btu's consumed by the facility. Savings may be in the consumption of electricity, natural gas, or other heating fuels (e.g., coal, propane). Fuel switching projects that reduce overall energy costs are not eligible unless it can be shown that a significant reduction in the consumption of Btu's is also realized for the facility.

Projects must involve the upgrading of the fixed facilities or structure of a building. Projects for the purpose of purchasing appliances, office equipment, or other devices that are

not integral to the building and can be removed easily are not eligible for grant funds. Examples of eligible projects may include measures such as the following:

- Lighting retrofits (relamping, electronic ballast, compact fluorescents, T-12 to T-8 fluorescent upgrades, improved controls)
- Daylighting accompanied by removal or downgrading of existing electric lights
- Replacement of windows (e.g., single glazed to double glazed, low-e, vinyl frames and sashes)
- Door replacement or addition of vestibules
- Other envelope improvements (sealing, insulation, roofing)
- HVAC system upgrades
- Boiler and central plant efficiency upgrades
- Improved domestic hot water heating systems
- Motor and pump upgrades

Other types of projects may be considered if applicants can demonstrate that significant energy savings will be achieved. Demonstration projects or projects using experimental technologies are not eligible.

However, for projects where equipment has reached the end of its useful life or where systems or envelope elements must be replaced due to breakage or disrepair, replacements should be above industry standard for efficiency; low-end replacements will be considered ineligible for funding. Where applicable, replacements and retrofits should exceed current energy codes for new construction by at least 10 percent.

Projects must also demonstrate a simple cost-payback period of less than ten years based upon energy savings resulting from the project; however shorter payback periods will receive higher evaluation scores (see Evaluation Criteria, below). Savings in maintenance and other non-energy costs can be considered as a positive factor for the overall project, but should not be included in energy cost payback calculations.

Energy Audits

To be eligible for funding under this program, all upgrades included in a project must have been identified in an energy audit. The audit must identify and specify energy savings and related cost savings that are likely to be realized as a result of modifying facilities or acquiring and installing one or more energy conservation measures. A utility company or an auditor approved by or under contract to a utility, an engineering firm, or other persons or companies with training and experience in conducting commercial or industrial energy audits may conduct energy audits. An independent third party who is not affiliated with a company that will perform work or that has made a bid for work on the project must conduct all audits. Assessments conducted by in-house staff will not be considered as eligible audits for identifying grant-eligible upgrades. The qualifications of the person performing the audit, including whether he/she is approved under any utility energy incentive programs, should be included in either the audit report or the application for assistance.

The energy and cost estimates identified in an audit should be the basis for calculating energy and cost savings, as well as payback periods, in the grant application. Estimates of cost paybacks should be calculated exclusive of financial assistance, such as this grant or any utility incentives. The "Energy Audit Information Template," below, provides a template for key information to be included in an audit. Applications and/or the audit submitted with an application should include the elements specified in the template.

New audits need not be performed for the purpose of applying for funds under this grant program if an eligible audit has been performed on the facility within the past two years. If an applicant chooses to have an audit performed for the purposes of applying for this grant, the cost of that audit may be applied to the matching funds requirement (see below). However, if the applicant is not chosen for a grant award, the applicant will remain responsible for the costs of such an audit.

For buildings that are served by Rocky Mountain Power, a free audit covering electricity-saving measures may be available for free. Information on Rocky Mountain Power's FinAnswer program may be found at:

http://www.rockymtnpower.net/Navigation/Navigation921.html

A list of auditors is also available by contacting SEP directly at the number listed below.

Grant Amounts and Matching Funds

SEP has as much as $75,000 available for grants under this program. The maximum grant for any single project is $15,000. A local government may submit several projects for consideration; however, each should be a clearly distinguishable, separate application. A single government may submit no more than three project applications and may be eligible for multiple awards.

SEP considers it important for grant recipients to be invested in the energy projects that it funds. Grant recipients must therefore provide at least 25% in cash funding for the eligible costs of each proposed project. (See below for definitions of eligible costs.) This 25% cash match must be provided by the grant recipient and not through a utility incentive program or other financial assistance from a third party. However, such third-party assistance may be used to cover costs not met by the SEP grant, so long as the grant recipient provides at least 25% of the projects, total funding for eligible costs. For example, a utility may offer to reimburse a city for 50% of the cost of energy efficiency improvements. A $50,000 total project cost is contemplated. If the utility provides $25,000, SEP awards a grant of $15,000, and the city provides the remaining $10,000, the city will not meet SEP's match requirement ($50,000 x 25% = $12,500). In such a case, SEP would reduce its award to $12,500 so that the city provides at least the minimum match. However, if a similar project had a total cost of $75,000, where the utility provided 50% ($37,500), SEP provided $15,000, and the city the remaining $22,500, and the recipient match would equal 30% and the project would be eligible for the full $15,000 SEP award.

Federal funds may not be used as a source of matching funds for the proposed project.

Payment of grant funds will be made on a reimbursement basis only after completion of the energy efficiency project. If actual project costs change during construction or installation, or if third party incentive payments are different from original projections, actual disbursed grant amounts may also be changed in order to ensure that the 25% recipient cash match requirements are met. If an original grant award is less than $15,000 and actual project costs increase, SEP will consider increasing grant awards, subject to funding availability and reasonableness.

Eligible Project Costs

Costs that are eligible for reimbursement through a SEP grant award and that are also considered eligible costs for purposes of meeting the 25% match requirement must be incurred to implement energy upgrades as described in the "Eligible Projects, Upgrades" section above. Specific types of eligible costs are as follows:

- Purchase of energy efficient equipment, machinery, fixtures, or building envelope components
- Purchase of hardware necessary for the installation of energy efficient equipment, machinery, fixtures, or building envelope components
- Installation costs
- Site preparation costs (where appropriate)
- Design and engineering costs
- Cost of a new energy audit (must be performed after issuance of this Request for Proposals and before the application deadline; also may only be used for matching cost).

Costs for equipment will be considered eligible only if the equipment is available through commercial vendors.

All expenses must be paid to third party vendors or contractors to be considered eligible costs. No use of in-house staff for any project element will be considered as eligible. In-house staff may be used as part of the overall project, so long as no SEP grant funds or matching funds are used to cover the time and work of such staff members.

Application Format and Components

All applications must be organized in the following format:

1. **Application Cover Sheet.** Complete the cover sheet provided below.
2. **Project Narrative.** Provide a complete description of the work to be undertaken in the project. (See below).
3. **Project Timetable.** Provide a schedule or timetable during which key project elements are to be performed.
4. **Cost Proposal and Budget.** Please list all costs on the Cost Proposal form below. Also list all cost shares and other cash or in-kind contributions by additional project partners (utilities, foundations, etc.).
5. **Project Cost Documentation.** Include documentation of the costs that underlie the proposed budget, such as contractor estimates or bids and product catalogue listings.
6. **Energy Audit Report.** Provide a copy of the energy audit that recommends the proposed project measures.
7. **Energy, Cost Savings, and Payback Estimates.** A section of the application should be devoted to demonstrating separate energy and cost savings projections and a projected cost-payback period. Energy savings projections should include reasonable and documentable estimates of savings. Savings should be stated in standard energy units (Btu's, kilowatt-hours, therms, etc.) per year. Cost savings should be based upon projected energy savings and current utility or other energy per-unit costs. Paybacks should be calculated as simple paybacks (total project cost divided by annual energy cost savings). Both cost and energy savings should be calculated by comparing the most-recent base year to projected post-project usage and costs.

Project Narrative

A project narrative must describe in detail the work to be performed for the project

and the energy efficiency upgrades to be installed. This should include project locations, products to be used, types of personnel or contractors involved, and other relevant details. It should also include information on the current condition of the building or facility and specifics as to what equipment, fixtures, or systems are to be replaced or upgraded. Energy savings estimates should be described for each element of the project. Photos, blueprints, plans, or other graphics may be included if they will enhance the reviewers' understanding of the project.

Oral Presentation

An oral presentation by an applicant to clarify an application may be required by SEP. However, SEP may award a contract based on the initial application without discussion with the applicant. If oral presentations are required, they will be scheduled after the submission of applications.

Evaluation Criteria

The following factors and weightings will be used to evaluate applications:

Weight	Evaluation Criteria
30%	Total project energy savings
30%	Project feasibility/practicality
20%	Project cost payback period
10%	Environmental benefit
10%	Geographic and local factors

"Total project energy savings" assesses the annual anticipated energy (not energy cost) savings for the project. "Project feasibility/practicality" represents the likelihood of the project being implemented as-planned or of generating the energy and cost savings anticipated, the difficulty of the project, and an assessment of the reliability of the technologies involved. "Project cost payback period" is a way of describing the economic benefit of the project to the applicant. "Environmental benefit" includes factors such as likely emission reductions, improvement in building "livability", reduction in hazardous materials, etc. Geographic and local factors represents SEP's desire not to have project awards concentrated in any one area and to provide funds to local governments with the greatest needs.

Grant Award and Negotiation of Contract

Upon favorable review of any grant application, SEP will notify the applicant of its intent to award the grant. While some applications may be awarded grant funds as originally proposed, SEP reserves the right to negotiate with the applicant to modify the proposed project's scope, budget, or overall grant amount. Final project terms will be by mutual consent. Once an agreement has been reached, a contract will be prepared to allow the project to begin.

Standard Contract Terms and Conditions

Any contract resulting from a successful application will include the State's standard terms and conditions. These may be found at the web link below:

http://purchasing.utah.gov/main/Contractinfo/TermsStatewide.pdf.

Verification and Site Visits

Grant recipients are expected to maintain energy consumption and energy cost records that will permit measurement and verification of actual savings resulting from the project. Such records should be made available to SEP upon request. Grant recipients will also be required to provide site access to SEP staff for project verification.

Reporting Requirements

Grant recipients will be required to submit quarterly reports to SEP during the term of the grant contract. Such reports will include the status of the project (if not yet completed), any deviations from the project or schedule as originally indicated in the grant application, estimated energy and energy cost savings after completion, problems encountered, and a general assessment of project success. After completion of the efficiency upgrade project, reporting should include information on energy usage and energy costs incurred. This information should be presented in a form similar to that shown in the "Sample Annual Energy Usage Report," page 12 below. A final report will be due within 30 days of the completion of the grant contract.

Timing and Length of Contract

Contracts resulting from successful applications will be for a period of 30 months in order to obtain at least two complete years of verification data. However, contracts may be extended for an additional twelve months beyond the original period by mutual consent. Applicants should plan on the completion of the building and installation phases of their projects by the end of December 2008.

Promotion of Project

Press releases will be issued by SEP announcing grant awards under this program. Recipients must agree to permit their projects to be covered by the news media and to cooperate with reporters and media outlets seeking to cover stories associated with their projects.

Submission of Application

Your application must be received at the Utah Geological Survey no later than 5:00 p.m. on Friday, January 25, 2008. Applications may be sent via either hard copy to the State Energy Program, Utah Geological Survey, P.O. Box 146100, Salt Lake City, Utah 84114-6100, or electronically to philippowlick@utah.gov. Applications received after the deadline will be ineligible for consideration.

Application Review Timeline

October, 2007	Issuance of Request for Proposals by SEP
January 25, 2008	Deadline for application to SEP
February 22, 2008	End of review process; SEP notifies applicants of intent to award
March 2008	Negotiation of contracts and awards made
April 2008	Contracts issued
December 2008	Deadline for installation of efficiency measures
December 2010	End of contracts; completion of reporting

Questions about the pilot program, this Request, or the application process may be directed to:

Philip Powlick, SEP Manager
Phone: 801-537-3365
E-Mail: philippowlick@utah.gov

Utah Public Building Energy Efficiency Pilot Program
Application Cover Sheet

Organization Name: _____

Business Address: _____

_____

Business Phone: _____

Primary Business Manager* or Contact

Name: _____

Title: _____

Phone: _____

E-Mail: _____

Primary Project Manager** or Contact

Name: _____

Title: _____

Phone: _____

E-Mail: _____

Name of Building for Project:_____

Project Building Address: _____

_____

Grant Amount Requested: _____

* - Business Manager is the person that will be SEP's primary contact for financial or contracting matters.

** - Project Manager is the person that will be SEP's primary contact for technical, construction, or installation matters.

Utah Public Building Energy Efficiency Pilot Program
Cost Proposal and Budget

Cost Component	SEP Share	Applicant Cost Share*	3rd Party Cost Share**
Equipment (Itemize major components on a separate sheet)	_____	_____	_____
Building Materials (Itemize major components on a separate sheet)	_____	_____	_____
Other Hardware	_____	_____	_____
Installation (includes labor)	_____	_____	_____
Engineering & Design	_____	_____	_____
Energy Audit	_____	_____	_____
Other expenses (itemize in comments section below)	_____	_____	_____
Total Costs	_____	_____	_____

* - Any non-cash cost shares should be described in the Comments section below.
** - Includes incentives from utilities and any other grants or loans in support of the project.

Comments (add additional pages if necessary):

Utah Public Building Energy Efficiency Pilot Program
Energy Audit and Application Information Template

A comprehensive energy audit of your building is required to be eligible for this program. From this audit, a detailed description of the project for which you are requesting funds can be developed. It is suggested that each application and/or the audit accompanying it include, at a minimum, the information below for the building that is to be considered for an energy efficiency upgrade.

1. IDENTIFY PROJECT

- Provide a detailed description of the proposed project or projects and all related changes to existing conditions.
    - Condition of the building before the project
    - Measures proposed to be taken to improve energy efficiency

2. BILLING/FUEL USE

- Provide billing information for the most recent 24 months for all energy types.
- List all fuel and utility companies and billing rate schedules.
- Include monthly energy cost, units of energy, and Btu's consumed.
- Break down fuel consumption into heating, cooling and base loads.

3. BUILDING SUMMARY

- Conditioned (Net) square feet (NSF)
- BTU's/Square Foot/Year
- Primary use of building
- # Zones - <u>For each zone:</u>
    - Square feet of zone, location and function
    - # Occupants and schedules
- Square feet, construction type, R-value of:
    - Roof
    - Walls
    - Windows (Include orientation, i.e., N, NE, etc.)
    - Doors
    - Floors
- Provide estimates of infiltration, exfiltration, and ventilation rates
- Installed wattages of:
    - Lighting
    - Equipment, motors, fans, etc.
- Temperatures:
    - Winter occupied
    - Winter unoccupied
    - Summer occupied
    - Summer unoccupied
- Temperature Control Type

- Heating and Cooling Systems:
    - Size and Type
    - Fuel Type
    - Age and Condition
    - Efficiency
    - Distribution Type, Temperatures and Condition
    - Related equipment and additional controls
    - Type and amount of maintenance and service.
- Hot water fuel type, size, temperature, use, and equipment
- Usage patterns and diversity for:
    - Occupants
    - Occupancy schedules
    - Lighting
    - Equipment
- Other: such as any variables that may affect standard consumption usage.

4. CALCULATIONS

- Show all calculations for energy savings recommendations and cite sources of cost estimates.
    - Explain calculations used to support savings estimates as required.
    - Include BTU'S, units of fuel and dollars saved per year
- Calculate the simple payback for each recommended energy saving measure

Utah Public Building Energy Efficiency Pilot Program
Sample Annual Energy Usage Report

The tables below provide examples of how energy and energy cost savings can be reported in quarterly and final reporting to SEP. Separate costs and usage should be identified for months both before and after project implementation. For energy costs other than electricity and natural gas, similar tables may be used specifying appropriate energy volumes.

Month	Electricity (kilowatt hours used)		Electricity cost (total dollars)	
	Before	After	Before	After
Totals				

Month	Natural gas (therms used)		Natural gas cost (total dollars)	
	Before	After	Before	After
Totals				